

# Product datasheet

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# ARG58402 anti-beta COP antibody

Package: 100 μl Store at: -20°C

# **Summary**

Isotype

Product Description Rabbit Polyclonal antibody recognizes beta COP

IgG

Tested Reactivity Hu, Ms, Rat
Tested Application ICC/IF, WB
Host Rabbit
Clonality Polyclonal

Target Name beta COP

Species Human

Immunogen Recombinant fusion protein corresponding to aa. 460-740 of Human beta COP (NP\_057535.1).

Conjugation Un-conjugated

Alternate Names COPB; Coatomer subunit beta; Beta-coat protein; Beta-COP

## **Application Instructions**

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	WB	1:1000 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	A549	
Observed Size	110 kDa	

## **Properties**

Form Liquid

Purification Affinity purified.

Buffer PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol

COPB1

Gene Full Name

coatomer protein complex, subunit beta 1

Background

This gene encodes a protein subunit of the coatomer complex associated with non-clathrin coated vesicles. The coatomer complex, also known as the coat protein complex 1, forms in the cytoplasm and is recruited to the Golgi by activated guanosine triphosphatases. Once at the Golgi membrane, the coatomer complex may assist in the movement of protein and lipid components back to the endoplasmic reticulum. Alternatively spliced transcript variants have been described. [provided by RefSeq, Jan 2009]

**Function** 

The coatomer is a cytosolic protein complex that binds to dilysine motifs and reversibly associates with Golgi non-clathrin-coated vesicles, which further mediate biosynthetic protein transport from the ER, via the Golgi up to the trans Golgi network. Coatomer complex is required for budding from Golgi membranes, and is essential for the retrograde Golgi-to-ER transport of dilysine-tagged proteins. In mammals, the coatomer can only be recruited by membranes associated to ADP-ribosylation factors (ARFs), which are small GTP-binding proteins; the complex also influences the Golgi structural integrity, as well as the processing, activity, and endocytic recycling of LDL receptors. Plays a functional role in facilitating the transport of kappa-type opioid receptor mRNAs into axons and enhances translation of these proteins. Required for limiting lipid storage in lipid droplets. Involved in lipid homeostasis by regulating the presence of perilipin family members PLIN2 and PLIN3 at the lipid droplet surface and promoting the association of adipocyte surface triglyceride lipase (PNPLA2) with the lipid droplet to mediate lipolysis (By similarity). Involved in the Golgi disassembly and reassembly processes during cell cycle. Involved in autophagy by playing a role in early endosome function. Plays a role in organellar compartmentalization of secretory compartments including endoplasmic reticulum (ER)-Golgi intermediate compartment (ERGIC), Golgi, trans-Golgi network (TGN) and recycling endosomes, and in biosynthetic transport of CAV1. Promotes degradation of Nef cellular targets CD4 and MHC class I antigens by facilitating their trafficking to degradative compartments. [UniProt]

Calculated Mw

107 kDa

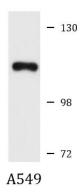
PTM

Proteolytically cleaved between Ser-528 and Ser-529 by CAPN8. [UniProt]

Cellular Localization

Cytoplasm, Golgi apparatus membrane, Peripheral membrane protein, Cytoplasmic side, Cytoplasmic vesicle, COPI-coated vesicle membrane, Cell membrane, Endoplasmic reticulum-Golgi intermediate compartment. [UniProt]

#### **Images**



#### ARG58402 anti-beta COP antibody WB image

Western blot: 25  $\mu g$  of A549 cell lysate stained with ARG58402 antibeta COP antibody at 1:1000 dilution.